

REMARKS

The present Amendment amends claims 51, 56-59, 64-67, 72-74, and 80-82, leaves claims 52-55, 60-63, 68-71, 73-75, 77-79, 82, 83, and 85-88 unchanged and cancels claims 76 and 84. Therefore, the present application has pending claims 51-75, 77-83, and 85-88.

Applicants' Attorney, the undersigned respectfully request that the Examiner contact Applicants' Attorney prior to examination so as to discuss the outstanding issues of the present application.

Claims 51, 52, 56, 57, 66-68, 72-76, 80-84 and 88 stand rejected under 35 USC §102(e) as being anticipated by Bleiweiss (U.S. Patent No. 5,841,997); claims 58-60 and 64-65 stand rejected under 35 USC §103(a) as being unpatentable over Bleiweiss in view of Langerman (U.S. Patent No. 6,751,680); claims 53-55, 69-71, 77-79 and 85-87 stand rejected under 35 USC §103(a) as being unpatentable over Bleiweiss in view of Chong (U.S. Patent No. 6,721,317); and claims 61-63 stand rejected under 35 USC §103(a) as being unpatentable over Bleiweiss in view of Langerman and further in view of Chong.

It should be noted that Chong is not an appropriate reference to be used for anticipatory or obviousness-type purposes to reject the claims of the present application being that the present application claims a priority date of February 2, 1999 which predates the effective date of March 4, 1999 of Chong. Therefore, the above noted rejection of claims 53-55, 69-71, 77-79 and 85-87 under 35 USC §103(a) as being unpatentable over Bleiweiss in view of Chong, and the above noted rejection of claims 61-63 under 35 USC

§103(a) as being unpatentable over Bleiweiss in view of Langerman and Chong based in part on Chong are rendered moot since Chong can not form the basis of a prior art rejection since it is not prior to applicants' invention. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw the rejection of claims 53-55, 69-71, 77-79 and 85-87 under 35 USC §103(a) as being unpatentable over Bleiweiss in view of Chong, and the rejection of claims 61-63 under 35 USC §103(a) as being unpatentable over Bleiweiss in view of Langerman and Chong.

With respect to the remaining rejections, namely the rejection of claims 51, 52, 56, 57, 66-68, 72-76, 80-84 and 88 under 35 USC §102(e) as being anticipated by Bleiweiss, and the rejection of claims 58-60 and 64-65 under 35 USC §103(a) as being unpatentable over Bleiweiss in view of Langerman. Applicants submit that the features of the present invention as now more clearly recited in claims 51-75, 77-83, and 85-88 are not taught or suggested by Bleiweiss, Langerman, or Chong, if it could be used, whether taken individually or in combination with each other as suggested by the Examiner. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw these rejections.

Amendments were made to the claims to more clearly describe features of the present invention. Particularly, amendments were made to each of these claims so as to more clearly recite a storage system including a plurality of disk drives for corresponding to a plurality of first paths, a controller to be coupled to a network for receiving data from an information unit coupled to the network and transferring data to the disk drives, and a switch coupled to

the controller by at least one of second paths. According to the present invention the switch is further coupled to each disk drive by one of the first paths, thereby forming a point-to-point connection between the switch and the disk drive. Further, according to the present invention the number of second paths is less than the number of first paths and the disk drives store data sent from an information unit through the switch and each of the disk drives have an identification (ID) number. Still further according to the present invention the switch conducts switching between the first and the second paths by transferring data to a selected disk drive among the disk drives by one of the first paths based on receiving data.

There is no teaching or suggestion in any of the references of record of the above described features of the present invention as recited in the claims.

Bleiweiss teaches that a switch circuit is connected to plural disk drive units through fiber channel loop as illustrated, for example, in Fig 3. Further, Bleiweiss teaches that the switch circuit is changed over when there is certain trouble or when the fiber channel loop is not connected to a slot.

However, there is no teaching or suggestion in Bleiweiss of the above described features of the present invention as recited in the claims that a point-to-point connection between the switch and the disk drive, that the number of second paths is less than the number of first paths and that the switch conducts switching between the first and the second paths by transferring data to a selected disk drive among the disk drives by one of the first paths based on receiving data.

Thus, Bleiweiss fails to teach or suggest that the switch is further coupled to each disk drive by one of the first paths, thereby forming a point-to-point connection between the switch and the disk drive as recited in the claims.

Further, Bleiweiss fails to teach or suggest that the number of second paths is less than the number of first paths and the disk drives store data sent from an information unit through the switch and each of the disk drives have an identification (ID) number as recited in the claims.

Still further, Bleiweiss fails to teach or suggest that the switch conducts switching between the first and the second paths by transferring data to a selected disk drive among the disk drives by one of the first paths based on receiving data as recited in the claims.

Langerman suffers from the same deficiencies as Bleiweiss relative to the features of the present invention as recited in the claims. Accordingly, combining the teachings of Bleiweiss and Langerman in the manner suggested by the Examiner in the Office Action still fails to teach or suggest the features of the present invention as now more clearly recited in the claims.

Langerman is merely relied upon by the Examiner for an alleged teaching of the use of a target ID in fibre channel protocol. However, there is no teaching or suggestion in Langerman of the above described features of the present invention as recited in the claims that a point-to-point connection between the switch and the disk drive, that the number of second paths is less than the number of first paths and that the switch conducts switching between

the first and the second paths by transferring data to a selected disk drive among the disk drives by one of the first paths based on receiving data.

Thus, Langerman fails to teach or suggest that the switch is further coupled to each disk drive by one of the first paths, thereby forming a point-to-point connection between the switch and the disk drive as recited in the claims.

Further, Langerman fails to teach or suggest that the number of second paths is less than the number of first paths and the disk drives store data sent from an information unit through the switch and each of the disk drives have an identification (ID) number as recited in the claims.

Still further, Langerman fails to teach or suggest that the switch conducts switching between the first and the second paths by transferring data to a selected disk drive among the disk drives by one of the first paths based on receiving data as recited in the claims.

Thus, Bleiweiss whether taken individually or in combination with Langerman fails to teach or suggest the features of the present invention as now more clearly recited in the claims. Therefore, reconsideration and withdrawal of the rejection of claims 51, 52, 56, 57, 66-68, 72-76, 80-84 and 88 under 35 USC §102(e) as being anticipated by Bleiweiss, and the rejection of claims 58-60 and 64-65 under 35 USC §103(a) as being unpatentable over Bleiweiss in view of Langerman is respectfully requested.

As noted above Chong is not an appropriate reference to be used for anticipatory or obviousness-type purposes to reject the claims of the present application being that the present application claims a priority date of

February 2, 1999 which predates the effective date of March 4, 1999 of Chong. However, even if Chong could be used, the teaching therein does not supply any of the deficiencies noted above with respect to Langerman and Bleiweiss relative to the features of the present invention as recited in the claims. Therefore, the combination of Bleiweiss, Langerman and Chong (if it could be used) fails to teach or suggest the features of the present invention as now more clearly recited in the claims.

Applicants note that the claims were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 95-112 of co-pending application No. 10/337,397. Filed on even date is a Terminal Disclaimer obviating this rejection. Therefore, reconsideration and withdrawal of this rejection is respectfully requested

It should be noted that the filing of the Terminal Disclaimer was not intended nor should it be considered as an agreement on Applicants' part that the features recited in the claims are taught or suggested by the claims of the co-pending application. The filing of the Terminal Disclaimer was simply intended to expedite prosecution of the present application.

The remaining references of record have been studied. Applicants submit that they do not supply any of the deficiencies noted above with respect to the references utilized in the rejection of claims 8-32.

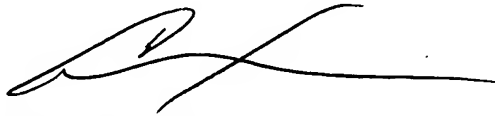
In view of the foregoing amendments and remarks, applicants submit that claims 51-75, 77-83, and 85-88 are in condition for allowance.

Accordingly, early allowance of claims 51-75, 77-83, and 85-88 is respectfully requested.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C., Deposit Account No. 50-1417 (520.38161CX2).

Respectfully submitted,

MATTINGLY, STANGER, MALUR &
BRUNDIDGE, P.C.

A handwritten signature in black ink, appearing to be 'C. Brundidge', written over a horizontal line.

Carl I. Brundidge
Registration No. 29,621

CIB/jdc
(703) 684-1120